HP services

HP StorageWorks Enterprise File Services Clustered Gateway

Installation & Startup Service
Customer Survey Questionnaire

The HP StorageWorks EFS Clustered Gateway Installation & Startup Service Customer Survey Questionnaire is used to verify that product and service pre-requisites have been satisfied. This is critical to the delivery of the Service.

Last Updated: 23 Mar 2005

contents

customer contacts

© Copyright 2005 Hewlett Packard Development Company, L.P.

Customer		Date	
Site Address			
Customer Primary Contact Name		Telephone	
Email		FAX	
2nd Customer Contact Name		Telephone	
3rd Customer Contact Name		Telephone	

HP contacts

HP Sales Contact Name		Telephone	
VAR Contact Name		Telephone	
Purchased Services:			
HP StorageWorks Enterprise File Services Clustered Gateway Installation and Startup Service		☐ Yes ☐ No	
Other Packaged Services (list here):			

hardware

Note: See Cluster Server Solutions for Quickspecs and HP StorageWorks Clustered File System Setup Guide.

2 or more HP StorageWorks DL380-SL Clustered Gateway heads/servers/nodes Refer to the DL380 guide for power, airflow, etc (I assume there is one in the box?)	☐ Yes ☐ No
Sufficient rack space for each node?	☐ Yes ☐ No
Ethernet switch Vendor/Model?	Vendor?_____ Model? _____
sufficient "front side" (file serving) Ethernet ports for two connections per node?	☐ Yes ☐ No
Ethernet ports Cont: Each node is designed to support two distinct front side data connections (note that NIC teaming/bonding is not support at this time)	These front side file serving connections could be on the same subnet or different subnets depending on the architecture of the front side network. Typically they are on the same subnet.

Does the front side switch support DNS Round Robin load balancing? Some kind of load balancing is required for proper performance across the cluster.	☐ Yes ☐ No Describe:_____
Can the environment support a separate private network for intra-cluster communication (separate switches or VLAN capable switches)? A private network is required for performance and reliability requirements.	☐ Separate switches ☐ VLAN capable switches
Does the private network have enough ports for two connections per node? The intra-cluster connection is required. A second connection of the integrated iLO card is also required for server based fencing. A third private and/or management network could also be used for the iLO ports.	☐ Yes ☐ No Describe:_____
Are there sufficient Cat 5 cables?	☐ Yes ☐ No
Are there 2 Fibre Channel cables per node? Each node has a dual ported HBA.	☐ Yes ☐ No
Is there a monitor and keyboard (optional KVM switch) to configure the individual nodes?	☐ Yes ☐ No
SAN Considerations	

Has the SAN been designed and implemented prior to the deployment of the Clustered Gateway nodes?
    o   Capacity and LUN's sufficient for the file serving needs
    o   All LUNs presented to all the nodes in the cluster
    o   LUN's (typically 3 per cluster) for node membership partitions [used in place of a quorum disk]
    o   For EVA's – have snapshots been planned for and BC licenses been obtained?
	☐ Yes
	☐ No
	☐ Yes
	☐ No
	☐ Yes
	☐ No
	☐ Yes
	☐ No

Are there enough ports on the Fibre Channel switches? A typical configuration is two switches with one port for needed per node. This allows a high availability configuration to be built.	☐ Yes ☐ No
Have the switches and arrays and associated firmware revisions been confirmed against HP Streams document for the Clustered Gateway?	☐ Yes ☐ No
Switch Information	Vendor/Model,_____ Firmware Rev,_____ Zoning (describe)_____ Topology (describe)_____
Storage Array Information	Vendor/Model, _____ Firmware Rev,_____
MPIO Considerations - MPIO is provided through the included QLogic failover driver or the included MPIO driver built into the Clustered File System Software.	QLogic FO_____ Built In_____
Is HBA failover to be used (recommended)? A dual channel HBA is part of the solution to support such configurations	☐ Yes ☐ No
Is HBA load balancing to be used? [Note, only available with certain storage arrays]	☐ Yes ☐ No

cluster information

DNS Servers	_____ 1, 2, or 3..
DHCP Server (not recommended). DHCP cannot be used unless IP addressed are assigned on a long term lease. Static IP addressing is recommended.	note
DNS Domain Name	_____
How many Nodes are in this cluster ?	2 to 16_____
Print the following page once for each node	…2 to 16

Server host?-----------------------→	Name:_____
iLO – The iLO card is required for server based fencing:------------------------→	Name:_____
☐ Default User (should be the same for all nodes)------------------→	
☐ Password (should be the same for all nodes)----------------------→	
☐ IP Address, Subnet--------------→	
NIC Ports (IP Address, Subnet)	
☐ Eth0 (built-in NIC #1) - used for file serving traffic------------→	
☐ Eth2 (built-in NIC #2) – used for intra-cluster communication-----→	
☐ Eth3 (PCI NIC) – used for file serving traffic----------------→	
☐ iLO card – used for serve based fencing------------------------→	
Note: for File Serving, multiple Virtual IP address will need to be allocated. This will be covered later.	

HP StorageWorks EFS Clustered Gateway Installation & Startup Service - Customer Survey Questionnaire –

NTP information

In order to maintain consistent time stamps on files, a NTP server is recommended.

What is the IP address of your NTP server? Note the NTP server should not be run on one of the cluster nodes.	_____

SNMP information

Used in setting up the HP Management Home Page (Insight Manager Agents)

SNMP R/W Community String	
SNMP RO Community String	
Management Station R/W IP address or DNS name	
Management Station RO IP address or DNS name	
SNMP Trap Community String	
SNMP Trap Destination IP address or DNS name	
Contact Name for SNMP Traps	
Equipment location for SNMP Traps	

infrastructure application information

Standard applications are supported as long as the application vendor supports SuSE Linux Enterprise Server 9	☐ Yes ☐ No
What backup software will be used	_____
What Anti-Virus software will be used (scan mode or real time mode)	_____
Is there other software that will be loaded on the system	SW_____

physical storage management

Each cluster node has two drives that contained a mirrored image of the bootable file system. No file serving data is kept on these drives. Any other available drive slots will be empty. Adding drives is not supported and is not helpful as the HP Clustered File System requires SAN based shared storage to function.

system state backup

After being configured, it is recommended that each node have its system state backed up to a safe place should the node need to be rebuilt. There is a save state backup tool provided to perform this task.	

Is there a place to store each node's state information? A NFS mount on a management server would be a good place to store this information. A USB drive could also be used to save each node's state.	☐ NFS ☐ USB _____

NFS file system planning

How many file systems will be created?	
How big will each file system be?	List:

How will the files systems will be allocated on the SAN?
    o   Will they be striped across LUNs?
    o   Will they be striped across arrays?
	_____

What are the NFS export points for the file systems?	
How many Virtual IP address (one per Virtual NFS Service) will you be using? It is recommended that each node have several Virtual IP addresses so that if a node fails, the workload can be evenly distributed amount the remaining nodes.	_____
What are the IP addresses for each Virtual NFS Service?	List:_____

notes